Uses of Digital Signage in Transportation

Digital signage quickly is replacing static signage in transportation applications. Along with displaying schedule information, digital signage can serve double duty by advertising products and services and generating additional revenue.
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Digital signage has become part of the transportation industry as easily and as seamlessly as the check-in kiosk. At the airport, digital signage informs us of arrival and departure times, directs us to the proper gate and provides news and weather information about the local area. On the plane, seatback screens keep us entertained while in flight.

Digital signage on taxis promotes local attractions, and screens in subway stations and at bus stops alert us to impending arrivals. Even at service stations digital screens on gas pumps help pass the time, and occasionally distract us while the pump continues to run.

As travelers have made digital signage an integral part of their journeys, those screens have opened up a host of new business opportunities. Fliers can choose from a number of entertainment options, and those subway and bus terminal screens carry a variety of messaging that can generate additional revenue.

And in a service disruption — or worse, a crisis situation — those screens can carry information that can minimize traveler confusion and help ensure safety.

In this guide, we will look at the ways the transportation industry is using digital signage to make the experience easier for its customers, and will cover some of the technology that digital signage companies are designing to capitalize on those opportunities.

We would like to thank LG Electronics for its sponsorship of this guide, which allows us to provide it to you free of charge.
CHAPTER 1

Primary Uses of Digital Signage

If one place in the world is most associated with travel, it is New York’s Grand Central Station. The 48-acre facility, properly called Grand Central Terminal, features 44 platforms serving 67 railroad tracks. More than 750,000 people pass through the doors of Grand Central each day.

So when the Metropolitan Transportation Authority of New York was looking for ways to increase the efficiency of its operations, it started at the top. The MTA partnered with strategy and technology design firm Control Group to deploy 18 interactive touchscreens at Grand Central. The screens display train arrivals and departures, show relevant service updates, allow travelers to plan the best routes for their trips and can display a neighborhood map and nearby attractions.

Tap the screen, for example, and a subway map appears. Touch any point on the map and the screen displays the best route to reach your destination.

“The kiosks offer several different services and features, including visual station directions, transfer and line alerts, countdown to arrival, relevant service updates, neighborhood maps and information and digital content loops for advertising and MTA messaging — all in real time,” said Damian Gutierrez, associate partner for strategy at Control Group. “Importantly, the MTA can also take over messaging and target certain stations with specific messaging in the event of an emergency.”

The MTA hopes eventually to deploy the touchscreens in up to 90 subway stations around the city, creating a network that will serve more than 5 million riders a day.

“Like the MetroCard kiosks, our On the Go kiosks are relatively easy to use and pretty self-explanatory,” Gutierrez said.

“We also designed the interface to minimize the need to touch the screen,” he said. “Our goal was to deliver the most amount of information to the user with the least amount of screen taps. New Yorkers are busy, and always in a hurry.”

“Our goal was to deliver the most amount of information to the user with the least amount of screen taps.”

— Damian Gutierrez, associate partner for strategy at Control Group
rush, so we need to get them their route and train status in a matter of seconds. If it takes a rider too long to map a route, they won’t use the system.”

And because New York is an international city, the touchscreens employ an interface that is heavily dependent on icons, graphical elements and visual cues for universal ease of comprehension.

“We wanted to engage people as quickly as possible, and we feel that this is a more elegant and efficient approach, as opposed to asking a user to sort through a language-options menu before beginning their experience,” Gutierrez said.

While revolutionary, New York’s system typifies the advances that are taking place with digital signage in transportation.

Arrivals, departures and scheduling

One of the most common uses of digital signage in transportation is informing travelers of arrivals and departures. The task originally was handled by mechanical boards with rotating numbers, replaced later by television-type monitors. Unfortunately, those monitors were prone to burn-in and were visually unappealing. Other options included LED boards, with red LEDs forming letters and numbers displayed on a black background.

The next step for digital signage to be used as arrival and departure boards is known in the industry as Flight Information Display Systems (FIDS). Along with the traditional back-end benefits of digital signage such as real-time updating and network connectivity, FIDS can aid the traffic flow of airports by allowing people to see the flight information in multiple areas en route to their terminals.

FIDS also can make the information larger so it can be seen from farther away, thus preventing large crowds gathering under LED boards trying to read their flight info. To make the information more visible, some airports have used larger screen sizes and put screens side by side, with dynamic messages displayed across them.

At McCarran International Airport in Las Vegas, for example, transportation officials teamed up with Denver-based Four Winds Interactive to create its digital signage program for the airport’s Terminal 3, which opened in mid-2012. The terminal features hundreds of digital signs, including interactive digital airport directories and double-sided video walls, to help passengers better manage their travel-related activities.

“One of our goals was to ensure that modern, helpful amenities were in place for travelers,” said Randall Walker, who oversees McCarran in his
role as director of aviation for Clark County, Nevada. “Four Winds Interactive’s software allows us to do just that by offering a wide variety of useful information via any single interactive sign. This helps patrons better navigate the airport and become aware of factors affecting their travel.”

Most notably, double-sided video walls featuring six portrait screens per side and reaching 15 feet tall are placed strategically near departure and arrival gates. Content on the gate signage includes real-time flight information, as well as destination-specific items such as weather forecasts and photo backgrounds of the travel destinations. To keep travelers in the spirit of Las Vegas, synchronized videos of rolling dice or slot machines in action are set to play at the top and bottom of each hour on the video walls at every gate in the terminal.

Wayfinding

Over the years, airports, train stations and other transportation hubs have expanded tremendously. John F. Kennedy International Airport in New York, for example, served about 50.4 million passengers in 2013, the first time in its history it surpassed the 50 million mark.

JFK is the busiest international air passenger gateway to the United States, with seven operating airline terminals and more than 125 aircraft gates spread out over nearly 5,000 acres. The airport, which plays host to approximately 70 airlines, is operated by the Port Authority of New York and New Jersey.

AirTrain JFK opened in 2003 as a way to help move the millions of travelers passing through the airport each year. The light rail service offers connections between terminals, rental car facilities, hotel shuttle areas and parking lots.

In addition, AirTrain connects the airport terminals and parking areas with Long Island Rail Road and New York City subway lines at the Jamaica and Howard Beach stations in Queens.

The fully automated system consists of 32 cars operating on three overlapping routes:

- The Howard Beach route ends at the Howard Beach/JFK Airport subway station.
- The Jamaica Station route ends at Jamaica Station on the Long Island Rail Road.
- The All Terminals loop is an airport terminal circulator serving the six terminal stations.

In 2009, AirTrain JFK had a ridership of nearly 4.5 million passengers.
The airport originally used static and LED signs to convey information about AirTrain, but travelers often found it difficult to determine the correct train to take. In addition, trains can be diverted for track maintenance or other issues, resulting in the potential for further confusion.

“We have 8.1 miles of track and 56 switches out there that need to be inspected on a regular basis, so nearly every day we are running a bypass scenario where, for example, the Howard Beach train could be running on the inner loop instead of the outer loop,” said Hugh McCann, general manager of rail operations at JFK.

“The biggest problem we had was signage and how to explain to customers when we are running a diverted service,” he said. “For someone coming in from Russia, that means nothing.”

Additionally, the airport needed a more convenient way to keep signage updated as airlines moved their operations from one terminal to another. Often, a traveler needs to move quickly from one terminal to another to make a connecting flight, so keeping that information up to date is critical for a smooth operation.

“Airlines move all of the time,” McCann said. “One day, they are flying out of Terminal 4; the next, they are flying out of Terminal 1. We get 10 or 15 changes every couple of months. How do we best tell that to people?”

To meet its signage needs, JFK airport officials deployed a digital signage system from Tightrope Media Systems along the AirTrain route. The system was unveiled in early 2010.

The signage displays information about approaching trains, the stops along a particular train’s route and what changes may affect the train’s service.

Tightrope officials worked with the companies that operate AirTrain and provide its supervisory control and data acquisition (SCADA) system to integrate digital signage into the train operations.

“We now have certain triggers that work with the digital signage, so if we go into a bypass strategy the signage gets updated automatically,” McCann said. “Now, for example, if it is a train that’s stuck and we run a divergent service, all of the information on the digital displays will get updated right away.”

To make the signage easy to read at a distance and provide information in a way that could be understood easily by international visitors, the system uses icon-based messaging rather than text.

Additionally, the airport deployed interactive kiosks at key locations along the AirTrain route.

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— Hugh McCann, general manager of rail operations at JFK.
"You can walk up to a kiosk, touch it, and it will give you information such as the best route to your terminal or the Jamaica or Howard Beach stations, in your choice of eight different languages," McCann said. "We are really servicing the international community."

The airport also deployed digital signage in employee break rooms throughout the airport. With a staff of more than 35,000 workers, the airport discovered that finding a way to convey information quickly and efficiently is crucial.

"The signage gets updated as to exactly what is going on with the system, what maintenance needs to be run, if there is an incident or if we want to get some other information out," McCann said. "The more we can communicate with employees, the better."

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**Penn Station digital signage network goes live**

One of the busiest — and most famous — transportation portals in New York City has a new digital signage and digital out-of-home media network up and running.

CBS Outdoor has announced that its Penn Station Digital Network is now a reality, servicing "the busiest passenger transportation facility in the United States," with more than 17 million passengers passing through every four weeks.

Multiple networks (e.g., 1, 2, 3, A, C and E subway lines, Amtrak, New Jersey Transit) flow through the terminal, including the region's largest — the Long Island Rail Road. Penn Station Digital Network’s multiple screens allow advertiser messaging to fully saturate commuters traveling in and out of the city, at various points throughout the concourse, the company said on its website.

The network, composed of 22 high-definition digital signage screens, delivers the LIRR concourse, where 75 percent of the traffic in Penn Station occurs, according to CBS Outdoor. Strategically positioned near ticketing booths and information screens, network screens are in direct line of sight of commuters with expanded dwell time — including those waiting for departure and track information.

"The magnitude of the Penn Station Digital Network will change the flow of traffic in this very busy transit station by placing strategic information throughout the station," Phil Stimpson, executive vice president of CBS Outdoor’s displays division, said in a statement. "This will have special appeal to advertisers, whose options have greatly expanded to include full-motion digital displays, traditional static units and station domination campaigns."

According to an MTA presentation to the Long Island Rail Road Committee, the LIRR "will be among the first in the country to provide such a robust network consisting of 26 digital monitors providing a combination of advertising and LIRR customer information."

The network will include 25 screens on the LIRR concourse (including 11 new screens providing train and customer information and replacing six cathode ray tube TVs) and one screen at the street level, outside the 34th Street entrance.

Also, according to Peter Kaszycki, vice president of business development for Manufacturing Resources International, LG-MRI has provided 47 full-HD digital LCD faces consisting of 72- and 55-inch digital LCDs and (one-by-four) 55-inch digital LCD arrays for Penn Station.

LED digital signage provider NanoLumens also recently announced that one of its 126-inch NanoSlim LED displays was part of the rollout, hanging directly over commuters’ heads as they travel through the LIRR corridor of the station.

According to the MTA presentation, the digital screens will be deployed throughout the LIRR concourse and will provide 24/7 advertising, along with train information, customer messages and marketing promotions. "More importantly, the LIRR will have the ability through the PIO to override all programming during an emergency or significant service disruption to communicate with its customers."
CHAPTER 2

Beyond the Basics

While digital signage long ago proved its value in conveying arrival and departure information and helping passengers find their way, the use of digital screens extends far beyond those applications.

Dallas-based RMG Networks, for example, is working to provide an alternative to the tattered in-flight magazines many travelers use to pass the time. RMG’s Airline Media Network reaches 35 million passengers per month on 2,200 domestic aircraft and 100 airport executive clubs.

RMG delivers messaging via channels including in-flight seatback and overhead screens, digital signage in airline clubs and Wi-Fi landing pages on laptops and tablet computers.

According to the company’s research, the average airline traveler makes $154,000 a year and has a net worth of $573,000. Twenty-one percent make more than $200,000 a year, 68 percent hold a professional or managerial position, and 56 percent are more likely to be the first to try new products — in other words, the type of person most businesses would be more than happy to have as a customer.

“Recent advertisers include a wide array of industries spanning consumer products, automotive, luxury products, B2B, technology, finance, software, food and beverage and travel,” said Garry McGuire, CEO of RMG Networks. “Brands include eBay, Alliance, American Express, AT&T, Bank of America, Beats by Dr. Dre, Crest, Disney Theme Parks, Verizon Wireless and more.”

According to the company, the approximate dwell times for the different networks are more than two hours for in-flight screens and more than an hour and a half for airport club screens. Passengers in food courts are exposed to the screens for an average of 30 minutes.

One of the company’s recent promotions was a partnership with online auction site eBay, which wanted to drive a trial of its mobile apps and activate an audience to bid and shop on ebay.com while they were flying. EBay Mobile and its agency Swirl worked with RMG Networks and airport Wi-Fi
provider Gogo to leverage traveling shoppers via a program dubbed “The Shopusphere.”

“The idea behind this program was to create an innovative, memorable in-flight shopping experience,” McGuire said. “EBay offered Delta and Virgin America passengers free in-flight access to ebay.com to shop and transact from 30,000 feet.”

Passengers had two points of entry for learning about The Shopusphere: in the airport via marketing signage and tutorial videos on digital screens and in their seats on the plane via the seatback and overhead screens. The campaign grew from a one-off project into a year-long promotion and garnered RMG a MediaPost 2013 Digital Out-of-Home Award for best location-based execution.


“For the first time ever, TV buyers can purchase airline media like television, using Nielsen data,” said Jim Bell, executive vice president of partnerships and sales operations, RMG Networks. “Nielsen’s recognition of the RMG in-flight entertainment network’s measurability confirms the engagement of this hard-to-reach and valuable audience.”

RMG isn’t the only company providing entertainment options for weary travelers. In 2013, media giant Clear Channel Communications partnered with San Francisco-based connectiVISION Digital Networks to launch ClearVision, which delivers a customized TV station within the airport environment.

Powered by Harris Broadcast InfoCaster hardware and software, ClearVision is being set up to deliver a mix of network and cable broadcast programming, in-house produced content, regional news and local advertising on uniquely branded channels for each airport.

ClearVision provides what is essentially a network feed to its affiliates (the airports) in various cities, with each affiliate also having space to run localized news, programming and advertisements that are unique to each location.

ConnectiVISION draws content from more than 200 content providers, including all the major networks as well as many of the cable networks and some premium online content providers, with much of the content short-
CHAPTER 2 Beyond the Basics

ened into “minisodes” for the 18-hour broadcast day of the network. The programming is dayparted, just like a regular television station, with morning news and talk, daytime, primetime and late-night programming running from 6 a.m. to midnight, with repeats overnight.

ClearVision also has deals with local television stations, mainly CBS affiliates, to provide local news updates, as well as deals to provide highlights from local sports franchises and teams.

Each hour of broadcast time includes 45 minutes of content; 12 minutes of local, regional and national ads; and three minutes for onsite branding or promotion of the airport itself.

“InfoCaster enables connectiVISION to build and create a unique branded channel for each airport on the network so that what travelers are seeing in the airport in Dallas is not necessarily what travelers are seeing in the airport in Raleigh,” said a Harris spokesman. “That unique ability to localize content is what sets them apart from other airport networks ... They’re really using advanced digital signage technology to build a true broadcast.”

**Ad revenue generation**

Of course, operators of transportation facilities wouldn’t have much interest in deploying digital signage networks if they didn’t make good business sense. While it’s difficult to quantify how much money is generated via placing advertising on digital signage, many entities are looking at those ad placements as an incremental revenue stream.

Ohio, for example, is placing digital signage kiosks at some roadside rest areas to help generate revenue for the state.

VitalSigns digital signage kiosks from media production firm Mills James have been deployed to 10 travel information centers alongside highways throughout Ohio. The nearly six-and-a-half-foot-tall digital signage displays are part of a program by the Ohio Department of Transportation to generate advertising revenue for road projects, according to Mills James.

The VitalSigns kiosks feature 46-inch displays with space for news, local weather, sponsor promos, advertising videos and information on area attractions. The units are constructed with commercial-grade public information display monitors and are encased in floor-standing housings to deter vandals and thieves. The displays are networked through Verizon Wireless so the content can be updated easily from a central location.

In many instances, the entities aren’t spending a nickel on their digital signage systems. In the case of the Grand Central Terminal touchscreens,
Control Group is footing the entire cost in hopes of recouping its investment via advertising revenue, which it will share with the city.

New York currently has a contract with CBS for subway advertising that earns the MTA about $100 million a year, but that contract will expire soon. Control Group believes it can generate as much as $500 million a year in advertising revenue through more effective targeted ads.

**Blowin’ in the wind: Stockholm subway digital signage reacts to passing trains**

A digital signage display on a Swedish subway platform reacts to passing trains, showing an ad with a model whose hair blows around her face when trains zip by, according to Mashable and The Huffington Post.

The digital out-of-home project is an ad for a line of pharmacy chain hair-care products with the tagline “Make your hair come alive,” according to Mashable. The subway platform ads in Stockholm were outfitted with ultrasonic sensors that detected oncoming trains, the site said. The ad features a model with a lush mane; when a train passes, her hair flaps in the wind and she struggles to keep it in place.

“We needed to build a device that could be calibrated to sense the arrival of the train and not react to passing passengers,” the production company Stopp Family, which designed the ad, wrote on its website, according to HuffPo. “Using an ultrasonic sensor, connected to a Raspberry Pi and a local network socket, we connected our device to the screen’s computer, where the film could be activated by the passing trains.”
CHAPTER 3

Using the Right Technology

If a digital signage network or kiosk isn’t functioning properly, people might give it a second try. If it’s still not functioning then, they’re likely to ignore it forever.

In addition, rather than conveying the impression of a transportation facility being on the cutting edge of technology, broken-down or poorly maintained digital signage networks might give travelers cause to wonder what else at the facility isn’t working properly.

It’s critical, then, that when choosing the type of equipment to deploy organizations choose the most durable equipment possible and conduct thorough testing to ensure that equipment works properly. Systems are likely to operate 24/7 and be exposed to a variety of temperature and weather conditions, and could be susceptible to vandalism.

In the case of Control Group and its Grand Central Terminal touchscreens, the company was able to head off some unforeseen issues that could have sunk its program. The Comark kiosks feature 47-inch touchscreens outfitted with a projective capacitive overlay display and run on a custom-built content management system.

"Prior to launch, we installed a testing unit in the Bowling Green station to understand the environmental impact on the kiosk and capture real-world user feedback," Gutierrez said.

"We learned that vibrations from the rumbling trains affected the touchscreen’s accuracy and that people found parts of the design unintuitive and the thick screen hard to use," he said. "With lessons learned from real-world testing, we tweaked the design, recalibrated to account for vibrations and switched to a lighter touchscreen display."

The Comark-built enclosures also are built to handle power-washing, as required by the MTA.

In addition to constant use, whether the screens will be exposed to sunlight can be a concern. In 2009, for example, media company Outdoor Promo-
CHAPTER 3     Using the Right Technology

ations signed a 20-year deal with the Regional Transportation Commission of Southern Nevada (RTCSNV) to supply digital signage for bus shelter curbside billboards on the Las Vegas strip, maintain the signs and manage the advertising on display.

The company deployed 18 sunlight-readable, 70-inch diagonal Digital Information Displays on prominent bus shelters spanning the Vegas strip from the Mandalay Bay Resort & Casino on the south side of the Strip to the Riviera Hotel and Casino at the north end. Each LCD sign, which incorporates localized audio as well as full video, will be seen by an estimated 1.5 million pedestrians and 1.8 million cars every month. The displays were manufactured by Samsung Electronics.

Offering a resolution of 1920 x 1080 pixels, the 1080p digital signs were customized to make them the brightest ever erected. While standard digital signage brightness is 600 nits and high brightness is 1,500 nits, the curbside billboard signage has a brightness level of approximately 2,000 nits, making it easy to read in the Las Vegas sun. Each sign can display up to 16.7 million variations of color and can be seen clearly from virtually any angle.

Advertisements change every 7.5 to 15 seconds on a continuous loop at each location. In addition to the TFT-LCD panel, the display panels comprise driver circuitry and an LED backlight unit, as well as custom airtight casings that are vandalism-resistant and are airtight to prevent dust intrusion or water seepage. Because of the high-temperature environment, each screen includes 10 fans to draw air through the unit to prevent heat buildup.

Transportation tracking

One growing use of digital signage in transportation involves using some sort of tracking technology to estimate the distance a bus, train or subway might be from the station and to notify travelers via station signage when their ride is due to arrive.

Early versions of the system involved the use of GPS locators on vehicles linked to stations via wireless data networks. Unfortunately, transmission of data from the vehicle to the network could be slow, resulting in imprecise information.

As a result, many systems have switched to RFID-based technology. When the vehicle comes within a certain distance of the station, an RFID signal triggers a notification on the digital sign.

Binghamton University in New York, for example, plans to install such a system on buses used for its Off Campus College Transport routes. Not
only would the system notify students of an impending bus arrival, it would integrate with fare systems to collect ridership data and allow the university to easily see which routes are most in demand.

**Pixel power**

It may be strange to see travelers stop and take pictures of an airport sign, but it's a common occurrence at McCarran International Airport in Las Vegas. The facility's new 84-inch ultra high-definition display is “stunning, not only in terms of clarity and rendering, but also in color,” said Samuel Ingalls, the airport’s assistant director of aviation/information systems.

The top half of the airport’s new sign displays wayfinding information, while the bottom half provides more commercial- and entertainment-oriented content.

Dan Smith, director of digital signage for LG USA, refers to the airport’s use of its cutting-edge product as “techorating.” According to Smith, more and more airports are looking for ways to incorporate signage that blends into the terminal décor and has an artistic feel. “It beautifies, blends and informs,” he explains.

At McCarran, however, the need to improve wayfinding in the airport’s busiest area inspired the first commercial installation of LG’s innovative display.

**Filling a need**

Wayfinding became a tremendous challenge in the D Concourse rotunda shortly after McCarran opened its new Terminal 3 in June 2012, explained Alison Rank, senior sales manager with Four Winds Interactive, the company that provides software for the new display and others throughout the airport. Months after the opening, the airport rearranged operations to allow some D Concourse carriers to move their ticketing and baggage services to the new building. With this change, passengers arriving at the D gates faced two terminal options, resulting in the need for more wayfinding assistance.

Frequent passengers were used to simply going down the escalator and veering left, so it suddenly became imperative to capture their attention and make them aware of the new “fork in the road.” Without better wayfinding, the airport risked having passengers board the wrong tram to claim their baggage.

Local culture also influenced selection of the 84-inch ultra HD display. Décor in Las Vegas is infamously extreme, with a lot of noise and other distractions competing to grab customers’ attention. The facility needed to refocus airport visitors and retain their attention long enough to make navigating less stressful and more seamless. According to the airport, its new screen does just that.
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While McCarran’s wayfinding messages aren’t overly dynamic, the lower screen demonstrates more of the display’s visual capabilities. Rank foresees ads targeting specific trade-show attendees, holiday greetings, event promotions and even emergency messaging all as good fits. Artwork is another option for the aesthetically pleasing and simple screen, adds Smith.

Ingalls describes the wayfinding portion of the display as fairly straightforward, with arrows pointing to baggage claims and airline logos directing passengers to their intended locations.

With designers continuing to tweak the wayfinding format, Ingalls says the real test is whether information is legible to travelers at the top of the escalator. “Ultra HD has really brought us the capability for this, which we wouldn’t have otherwise.”

Considerations when choosing display technology

- Can the display handle the rigors of 24/7 operation? Nothing makes a deployment look worse than having multiple screens out of order. For kiosk or touchscreen applications, if someone approaches the screen and it’s out of order they might give it another try. If they try to use it a second time and it’s still out of order, they won’t try to use it again.

- Can the screens withstand vandalism attempts, exposure to the elements and exposure to a variety of cleaning solutions? Unfortunately, deploying digital technology in a public setting means the screens are likely to encounter those with less-than-honorable intentions. In addition, custodians are likely to use a variety of cleaning solutions and techniques on those screens.

- Are outdoor screens bright enough to be seen in strong daylight? Depending on the environment, bright sunlight can make some screens unreadable. In addition, that sunlight likely means high temperatures as well.

- Is the screen manufacturer able to deal with issues quickly? There’s no doubt that a successful deployment includes long-term maintenance. Working with reliable vendors is critical to solving problems quickly.
In 2013, Canadian media giant Quebecor Media and public transport agency Société de transport de Montréal (STM) announced what they called “a world’s first in street furniture that will benefit all Montrealers and visitors to the city” — 84-inch interactive digital signage transit shelters featuring gesture recognition.

The new state-of-the-art shelters are intended to bolster Quebecor Media’s positioning in the out-of-home sector in Montréal, enhance the commuter experience for STM clients and help advertisers reach their target audiences more effectively.

When someone approaches the screens, for example, the size of an advertisement changes. He or she can control a cursor on the screen, using it to flip through product catalogs or play music files. In addition, commuters can access news and weather feeds as well as view bus schedules. In September 2013, Quebecor Media began installing the digital shelters across the Island of Montréal.

“Building on our culture of innovation and our strong relationship with Quebeccers, these digital bus shelters, which will be installed across the Island of Montréal, are certain to please users of mass transit, visitors and advertisers alike,” Robert Dépatie, Quebecor Media president and CEO, said in an announcement. “The powerful, user-friendly technological platform we have created will also enable us to upgrade the product over time and steadily improve the fixtures seen on Montréal streets.”

The agencies are in the process of deploying 40 of the units around the city of Montréal featuring Manufacturing Resources International’s BoldVu 84-inch outdoor design, according to LG-MRI’s Kaszycki.

“This long-term agreement is the result of a rigorous call for expressions of interest process,” said Michel Labrecque, chairman of the board of the STM. “We will draw on Quebecor’s energy, dynamism and capacity for innovation to replace our transit shelters, keep them clean and in good condition, keep commuters better informed and increase our non-fare revenues. We are very pleased with this business partnership, which has been...
established in collaboration with our commercial arm, Transgesco, and we welcome Quebecor’s socially responsible commitment to mass transit and to our clients.”

**Mobile phone integration**

Nearly every traveler today is armed with a mobile phone. One of the key challenges digital signage deployers face is finding a way to tap into and leverage that technology.

One of the features Control Group is working to incorporate into its New York subway kiosks is the ability to send text notifications to riders’ phones.

“Soon, they will be equipped with beacon technology that will revolutionize the overall transit experience, turning our network of wayfinding kiosks into underground proximity beacons that can enable real-time, contextually relevant information to be displayed on riders’ phones even in the absence of cellular and GPS signals,” Gutierrez said. “For commuters who opt in, this will provide groundbreaking new interactions between riders, the MTA and advertisers.”

And with the Federal Aviation Administration considering revising its policy banning cell phone use on airplanes, RMG Networks is looking at opportunities in that arena.

“RMG Networks is right in the middle of many innovations in the dynamic in-flight, mobile/wireless and place-based media marketplace,” RMG’s McGuire said. “We are constantly exploring new ways to leverage our screens, content, technologies and partners to enhance the experiences of engaged audiences and build brand equities for our advertisers.”

**Digital signage passport kiosks land at Houston Airport**

Houston’s George Bush Intercontinental Airport has deployed automated passport-processing kiosks that also can be used as digital signage advertising signposts.

The kiosks, from GCR Inc., collect passengers’ passport and flight information, as well as their customs declaration data. The kiosks then scan passengers’ fingerprints, take their photographs and issue receipts.

According to a news release from GCR, the Automated Passport Control (APC) Kiosks are constructed with commercial-grade durable materials and can be customized with each airport’s unique logo and color scheme. Overhead digital signage can be added to the top of each kiosk to offer additional information or marketing opportunities for arriving international passengers.

“The development of the APC Kiosk solution was a true partnership between [Houston Airport System] and GCR, and we worked collaboratively to leverage technology to improve passenger customer service,” Tim Walsh, director of aviation services for GCR, said in the release.
Chicago to deploy digital media at O’Hare and Midway Airports

Chicago’s City Council voted in May 2013 to award Clear Channel Airports a new five-year contract with five one-year extension options to provide comprehensive indoor digital media programs at Chicago’s two airports, O’Hare and Midway International, according to an announcement from Clear Channel Outdoor Holdings Inc.

Clear Channel said the contract could deliver more than $25 million annually to the Windy City. Clear Channel Airports, a division of Clear Channel Outdoor, has a long history in Chicago, having owned and operated advertising space at both airports since 2002.

“The new advertising platforms will enhance the look and feel of the global gateways to our city, O’Hare and Midway, with vibrant, dynamic displays and interactive features that set a new world model for other cities and airports to follow,” Chicago Mayor Rahm Emanuel said in the announcement. “It includes cutting-edge technology that will inform and entertain travelers, and help them better navigate Chicago’s airports. The agreements also provide opportunities for disadvantaged business enterprises and will optimize concession revenues to the airport.”

In addition to enhancing the air passenger experience with interactive displays and real-time information, the media technologies are expected to attract local, regional and global advertisers, delivering to the city more than $25 million annually from ads and sponsorships sold in O’Hare and Midway.

Featuring nearly 400 digital devices, Clear Channel’s program will reach more than 66 million passengers in Chicago annually. Using flexible, diverse and interactive technologies, the program includes:

- The first ever 360-degree digital globe in an airport suspended from the ceiling of Terminal 3.
- Two digital soffits (overhangs) comprising a total of 60 LCD screens creating 412 square feet of dynamic digital surface each.
- A full network of interactive digital directories providing travelers instant access to information on restaurants, hotels, etc.
- Embedded digital tablets available to travelers within sponsored FreeCharge work stations allowing passengers to connect with work or home.

“Clear Channel is excited to continue its partnership with the City of Chicago,” said John J. Moyer, vice president, Clear Channel Airports. “This new contract will give Chicago’s Airports the latest digital technologies for advertisers to connect with millions of travelers, on a greater, more meaningful level than before while delivering an additional revenue stream to the city.”

The Chicago contract represents one of more than 47 new contracts awarded to Clear Channel Airports over the last two years to provide similar services in airports across the country including Denver, Philadelphia and Detroit International airports.
It’s difficult, if not downright impossible, these days to travel without encountering a digital screen. From Times Square to the most remote backwater, digital signage has become an integral part of the travel experience.

As gesture-based and touch interaction with digital screens have become integrated into our everyday lives, we have come to expect that we can tap a digital screen and receive a reaction. And as more of us carry smartphones, we increasingly are coming to expect that the screens that surround us can communicate with the screens in our pockets.

A funny scene in the movie “Wall Street: Money Never Sleeps” was when anti-hero Gordon Gekko is released from prison. The last item the correctional officer returns to him is the brick-style cellular phone that, while a symbol of cutting-edge technology in the 1987 original film, is little more than an antique doorstop today.

It’s the same with digital signage. Not long ago, digital signage in transportation meant little more than flickering black-and-white TV monitors displaying flight arrivals and departures. Today, digital screens keep us informed about virtually all aspects of the travel experience, entertaining us in the process.

Just imagine where we’ll be in another 25 years or so. Thanks for reading.